

DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program

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January 19, 2007

Contract No. 04-0120F4

04-SF-80-13.2 / 13.9

Self-Anchored Suspension Bridge

Letter No. 05.03.01-000116

Michael Flowers
Project Executive
American Bridge/Fluor Enterprises, a JV
375 Burma Road
Oakland, CA 94607

Dear Michael Flowers,

Welding Review Comments, Submittal 37

We have reviewed submittal ABF-SUB-000037R00, dated January 11, 2007. In discussions with ABF's Welding Quality Control Manager (QCM), Mr. Jim Bowers, we understand the primary purpose of this submittal is to provide the Department with the documents for the proposed 3rd Party Inspections (Moody International). Moody International is acceptable for 3rd Party Inspections.

The submittal also contains: five (5) certified welding inspectors (CWIs) to be used by ZPMC for the purposes of conducting welder/welding operator qualification testing for ZPMC; sample welding operator qualification record; welding procedure specifications (WPSs) to be used for qualification testing; and the supporting base metal, backing material and welding consumables (electrode and shielding certifications). These documents appear to be in general compliance with contract requirements. The following comments are provided regarding this submittal:

1. The CWI certification record for Kaifeng Shi will expire at the end of January 2007. A copy of this individual's CWI renewal certification will need to be submitted when received by ABF/ZPMC if this person is utilized after January. Additionally, a copy of the CWI wallet card and/or the visual acuity record needs to be submitted in future submittals.
2. An Organization chart showing the QCM, QC firms and personnel, and NDT firms and personnel was not submitted.
3. The submittal contains two (2) sample qualification records for one welding operator, Mr. Xu C. (?), ID # 360281197909215437, for the SAW process, one per AWS D1.1, 2004 (?) and one per AWS D1.5, 2002 appear to be in general compliance with the contract documents. The following comments are applicable to these documents:
 - The two (2) qualification records for the SAW welding operator does not qualify for welding FCM/SPCM. Side bend testing would be required in addition to radiographic testing (RT).
 - The qualification record per D1.5 can be revised to reflect the operator is permitted to weld in the 2F welding position.
 - Larger, more legible, copies of the qualification records are requested for future submittals.

The following comments are regarding the submitted WPSs and welding consumables:

1. All WPS's are required to be signed by the authorizing party for ZPMC and WPSs used for production and are required to be qualified, need to have the supporting PQRs and associated documentation submitted for review.
2. The welding consumables need to have all of the required data translated and the diffusible hydrogen content needs to be reflected for all electrode certifications.
3. The gas shielding certifications that reflect the dew point used for the FCAW process needs to be submitted.
4. Some of the WPS's list backgouging as part of the root treatment. This is not applicable for standard qualification tests.
5. The WPS's for the horizontal (2G) welding position do not have to be a single-vee groove.

There are several items not submitted and will need to be addressed in subsequent submittals to be reviewed by the Engineer, as discussed with Mr. Jim Bowers. We understand some revisions to the NDT procedures previously submitted (Ref. TRN 00017), and the development of other procedures and testing techniques will be determined and concluded during the fabrication mock up stages and development of the WQCP and fabrication plans, however a WQCP needs to be submitted and approved prior to welding.

Please address the above comments in the development and submittal of the WQCP. If you have any questions, feel free to contact Stanley Ku or one of the METS representatives in the Working Drawing Campus.

Sincerely,

<<< ORIGINAL SIGNED >>>

GARY PURSELL
Resident Engineer

cc: R. Morrow
S. Ku
B. Boal

file: 05.03.01, 55.0037